



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

07.405

652.1

N54-

pt. 9

LB Pamphlet Binders

are carried in stock
in the following sizes

	HIGH		WIDE		THICKNESS
1525	9 inches		6 inches		$\frac{1}{2}$ inch
1526	9 $\frac{3}{4}$	"	7 $\frac{1}{8}$	"	$\frac{1}{2}$ "
1527	10 $\frac{1}{2}$	"	7 $\frac{3}{8}$	"	$\frac{1}{4}$ & $\frac{1}{2}$ "
1530	12	"	9 $\frac{1}{8}$	"	$\frac{1}{2}$ "

Other sizes are made to order

Library  Bureau

Library supplies of all kinds

9

Harvard College Library
THE GIFT OF
GINN AND COMPANY

THE NATURAL SYSTEM
OF VERTICAL WRITING

By A.F. Newlands & R.K. Row



TEACHERS'
MANUAL



D·C·HEATH·&·CO· BOSTON· NEW YORK· &· CHICAGO·

**GINN AND
COMPANY**



• • **Et Libris** • •

TEACHERS' MANUAL

TO ACCOMPANY

The Natural System of Vertical Writing

BY

A. F. NEWLANDS AND R. K. ROW

Copyright, 1896, by A. F. NEWLANDS and R. K. Row

BOSTON, U.S.A.

D. C. HEATH & CO., PUBLISHERS

1907

Edw T 6457.07.405-

HARVARD COLLEGE LIBRARY
GIFT OF
GINN & CO.
DEC 11 1930

TABLE OF CONTENTS.



	PAGE
INTRODUCTION	v
CHAP. I.—THE NATURAL SYSTEM OF VERTICAL WRITING: SPECIAL FEATURES:	
Narrower Page	1
No Guide Lines	1
No Tracing Copies	2
Simplification of Letter Forms	3
Large Copies	5
Proportion	6
Grouping	7
Illustrations	7
Lines joining Letters in a Word	7
Character of the Copies	8
CHAP. II.—MATERIAL:	
Desks	9
Pens	9
Pencils	9
Copy-books <i>vs.</i> Blackboard	10
Blackboard Writing	11
CHAP. III.—THE WRITING LESSON:	
Time and Length	11
Position	12
Penholding	16
Movement	19
Training in getting Clear Concepts	20
Allow no Careless Writing	20

CHAP. III.—THE WRITING LESSON— <i>Continued.</i>		PAGE
Backhand		21
Speed		21
Ordinary Class Writing		24
The Teacher's General Writing		24
CHAP. IV.—SPECIAL SUGGESTIONS:		
Book I		25
Book II		26
Book III		27
Book IV		27
Book V		27
Book VI		27
CHAP. V.—COURSES OF STUDY IN WRITING		28

INTRODUCTION.

No subject in elementary schools has heretofore occupied more attention than writing. Normal schools and teachers' institutes have laid stress upon it, educational papers have given it an honored place, special teachers and supervisors have been employed, and regular teachers have devoted to it a large share of attention. Notwithstanding all this, writing has degenerated and there has been no real satisfaction with the results of school instruction in this branch. Business men have generally acquired a hand very different from that taught in the schools, and have insisted that their young assistants learn a new style. The demands for speed and legibility have, in the majority of cases, greatly modified the writing considered standard in our schools.

From all this dissatisfaction relief has come in a thorough reform in the style of writing. The arguments for vertical writing have been generally accepted by progressive educators. There is no longer any doubt that vertical writing is more legible, more hygienic, simpler, and more rapid than the slanting hand. With many now the important question is: *How can we most quickly and easily effect in our schools the change from the teaching of slant writing to the teaching of vertical writing?* To answer this question is the purpose of this little manual.

The change involves several important factors, but with a simple system there is no serious difficulty. Persons long accustomed to hair lines, flowing curves, delicate shading, and complex letter-forms, are at first unable to see the full beauty of writing with uniformly strong lines, simple letter-forms, and no more shading than in ordinary Roman type. Of course one cannot at once, if ever, forget what he has thoroughly learned, but progress demands a new point of view, and new ideas of fitness and purpose in writing.

The vast majority of pupils like the vertical writing. Only a few of the older ones, especially trained in the position and movement for slant writing, find it difficult to make the change.

SUGGESTIONS FOR A TEST OF IMPROVEMENT IN WRITING.

Use full sheet of examination paper. At the beginning of the year have the pupil write on the top line the name of the town, of the school, and the grade; on the second line let him write his own name and the date, followed by one of the following selections.

At the end of the first term have the pupil write the same selection again on the same sheet of paper, putting down the new date. At the end of the second term there should be a third writing of the selection, with the new date, and again at the end of the third term. This gives the four writings, with the date of each. It would be well to have the name written each time on the same line with the date.

These papers should be kept by the teacher in her desk or sent to the school office for reference and examination by the school officers. They will furnish a convenient method of testing the work in the schools.

It is well for the children to learn the selection and write it from memory rather than to copy it from the blackboard.

For grades five to nine :

So nigh is grandeur to our dust,
So near is God to man,
When duty whispers low, "Thou must,"
The youth replies, "I can."

For primary grades :

Be kind to each,
Be kind to all,
Though they be poor.
Or great or small.

CHAPTER I.

THE NATURAL SYSTEM OF VERTICAL WRITING: SPECIAL FEATURES.

NARROWER PAGE.

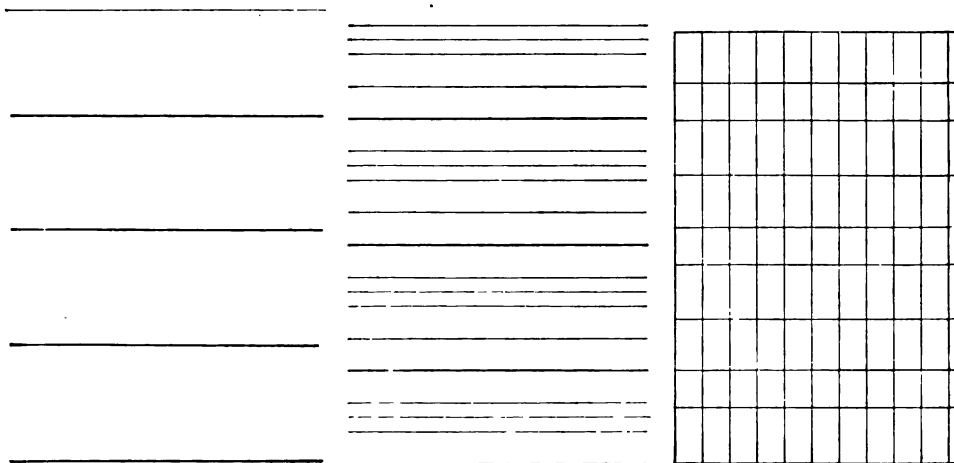
The NATURAL SYSTEM presents a much narrower page than most copy-books. In the plan of the books the needs of very young beginners have been first considered. It is realized that most writing, even by adults, is done upon very narrow note paper, and that it is when the beginner tries to carry the pen more than a few inches to the right of the median line of the body that the mischievous twist of the body begins. Therefore the narrowest page consistent with the presentation of a connected sentence for copy is the best for the beginner.

NO GUIDE LINES.

The NATURAL SYSTEM uses only a base line, thus leaving a fair, clear, and attractive space for the pupil's work, and presenting an absolutely hygienic page. This is in the strongest contrast with almost every other copy-book, vertical or slant, that has up to this date been published in this country, the finely ruled lines and spaces of which are more injurious to the eye than anything else the pupil encounters in his whole school life. Authors and publishers of copy-books have vied with each other in this absurdity, giving a definitely prescribed height or length for each letter and part of a letter and often a prescribed width for each part of a letter. It would be as reasonable to try to teach a child to talk by prescribing the pitch and length of every tone he utters, or to require a child just learning to walk to take a step of just so many inches and fractions of an inch in length. It is impossible to perceive form, or acquire writing movement, while guiding the pen from line to line on paper so minutely ruled. Let any teacher try to write a page with such ruling and then judge of the difficulty of learning to write under these restrictions.

It will be argued that very excellent results have been and are now being obtained by practice on paper so ruled. This is a mistake. To many persons the results seem excellent, but it is a deception. The work is only a kind of pen drawing and does not in any sense represent writing power.

These hedging limitations repress individuality. No two children will naturally make all their letters of the same size or relative proportions. The engraved copy supplies a model to all, but in working from that model the learner must be free to express himself, if he is to do his best work, and in doing his best to learn to do better. The following diagrams in some degree contrast the appearance of a section of a page of the NATURAL SYSTEM with others in common use, in the matter of guide lines. The disadvantage of complex ruling is much more apparent when seen in a full page and in the pale blue ink generally used.



Section of page of Natural System of Vertical Writing.

Sections of pages of Writing Books showing Complex Ruling.

On which kind of ruling would you prefer your pupils to write ?

NO TRACING COPIES.


Another great mistake, akin to the use of space-ruling, is the use of tracing copies. The reason for their introduction was probably the same ; namely, to compel, as far as possible, the young child to make the letter forms precisely the same as

the copy. They sometimes accomplish this purpose, and the work is shown by teachers and others as an exhibition of marvellous skill. As a matter of fact it only shows how children can be led to work at such stupid and stupefying toil as guiding the point of the pen up and down, in and out, along a maze of lines usually so faintly printed as to be trying to the eyes. While engaged in this senseless, wasteful, harmful practice it is impossible for a child to really see the form of the letters, and the work in no way demands that he should observe them. Whereas, learning to write requires that one should perceive clearly, not only the whole essential form of the letter to be made, but also its relation to adjacent letters in the word.

The practice of a writing movement is wholly out of the question with tracing copies. The first effort to really write such a copy runs the pen off the line, and mars the *beauty* (?) of the page. There is only one way in which this task may be done—by patiently and laboriously watching the point of the pen, and steering it with the utmost care along the dizzy line.

Let any one who believes this device has any true value, sit down and try a page of it for himself, or let him compare the work of a class of children who have had a year or two of this training with a similar class who have had an equal amount of practice in writing without tracing copies, and decide which are potentially the best writers.

SIMPLIFICATION OF LETTER FORMS.

The authors of the NATURAL SYSTEM OF VERTICAL WRITING have, in pursuance of their plans to confront the beginner with as few difficulties as possible, presented letter forms as nearly like those of print as is consistent with ease in making the form with a pen. The result is that any child who can read print can read the letters of this system at sight, and has to learn practically but one form of the letter. It is here that the most effective simplification of the old letter forms comes in. In the slant writing much was made of practice upon a few elements under the supposition that if these could be readily made, all difficulties of writing would be practically conquered. It was considered an important achievement when a child could make quickly and gracefully the "capital stem"  as then he could build upon it fourteen different letters, namely:


As movement, complexity of form, and beauty of curve, and not simplicity and legibility, were the ends sought, it was of no consequence to the maker of the "system" that by this use of the same capital stem (which was in all cases the most prominent feature of the letter) he was reducing them all as near as possible to *sameness*.


Under the new criterion of *legibility* it is at once seen that the letter forms should be such that, as in the case of print, each letter will stand out with the utmost distinctness and peculiarity. The "Capital Stem" then—if one choose to name it so—of the NATURAL SYSTEM is the simplest mark a child can make with a pen, viz.: | Upon this can be made etc., and in each case the distinctive stroke is *not* the capital stem, but the *added stroke*, which in each case is unlike the distinctive stroke of every other.



An examination of all the letters of the Natural System will show how well they embody this idea. For some generations the script forms of many letters have been such as are very unlike those of print, and far more difficult to make; for example:

These in the NATURAL SYSTEM are dropped, and the instantly recognized are restored, to the comfort of both writer and reader. The letter in the NATURAL SYSTEM which effects, perhaps, the most desirable change is the small "g" which is not only the nearest return to the Roman printed small "g," but the one which flows by far the most easily and readily from the pen, leaves the pen in the best position for the following letter, and, moreover, and most important of all, it is the form which nine out of ten business men adopt or approximate when they have gotten away from the pressure of the school drill, and have settled down to their own business hand. Examination of any file of business letters will speedily convince any one of this. The adoption of this simple "g" also made it possible to simplify the "q," giving it a pure print form. In these days of returning common

sense, the length to which the mania for complex and difficult letter forms was carried is already almost past belief. The copy-books which not long ago enjoyed probably the largest vogue in this country gave the correct form of the capital "K" as follows:

lows:  and the formula for its construction was:

"The  combines principles 2, 7, 3, 2, 2, 3, 2. Height of right side, 3 spaces; of left side, 2½ spaces. Width, entire 4 spaces; at base line, 3½ spaces; left half and distance between halves at top and base same as in H. Small loop at mid-height, and at right angles to main slant, count 1, 2, 3, 4, 5, 1"!!!

Contrast with this  the form given in the NATURAL SYSTEM  and consider which is according to common sense, and the more easily learned by a child!

It will be observed that wherever possible the loop has been dispensed with. It is retained in the "b" and "l" to avoid the possibility of confusion with the "v" and "t" respectively, and in the developed "f" and in the "j" for the sake of speed, because the initial curve in the primary "f" necessitates with many persons a distinct stop of the pen, and the same would be true at the bottom of the "j" if it were terminated like the print form.

The form of the capital "A" given is the one most like the print capital letter. It has been found that the enlarged form of small "a" tends to degenerate so that it is indistinguishable from the small form. Should some, however, prefer to use the enlarged small "a," it will be found that they have had abundant practice in writing the small "a," and all they have to do is enlarge the form already learned.

LARGE HEADLINE COPIES FOR BEGINNERS.

The NATURAL SYSTEM conforms exactly to the hygienic principle, that as the first movements of the child are made by means of the large muscles which are first developed, and are therefore movements of a vague character and imperfectly controlled, whereas skilfully made movements of a minute sort depend on the small muscles which are latest differentiated and brought under control, it is in the highest degree wrong to set children to copying small letters made with hair lines. It is wholly unnatural for young children to make small forms, and undesirable that they

should; they tire and become irritable if forced to do it. Observe their sewing and drawing as well as their unrestricted writing. Moreover, the correct form is much more easily and clearly perceived in large forms than in small ones, and the movement used is infinitely freer and more natural. All persons familiar with kindergarten practice know the revolution which is taking place in it and the greatly increased size of the objects now used as well as the great increase in amplitude of the movements and the manipulations now required. So far from the ultimate size of letter being the proper one for a *beginner*, the child should be confronted with a very large copy, made with very emphatic and clearly distinguishable lines in which the letter form can be clearly seen and studied, and the size of the letters should be gradually reduced as the pupil's control of his muscles increases. The importance of this principle cannot be overstated. Moreover, it is recognized that the size of the letter which the child will ultimately make will, and properly so, depend upon his own choice, and not upon an arbitrary standard of the copy-book. Every one knows that not all the school drill of the past has been able to establish a uniform size of letter or control the size of handwriting beyond the school period. In business and social life every person finally adopts and uses the size of letter which his taste, temperament, and convenience dictate, and the great diversity in this matter no more excites comment or thought than do the different sizes of type used in books or in the headlines and news columns of our daily papers.

PROPORTION.

In the NATURAL SYSTEM the proportion between the height of the short letters on the one hand, and the stem, loop, and capital letters on the other, is the very simplest one that the mind can entertain, viz.: The height of the short letters is half that of the stem, loop, and capital letters. By the adoption of this simplest of all proportions, a reform of the utmost importance has been effected. By it all the long letters, including "t" and "d" are carried to the same height as the capitals, all the annoying and utterly needless half and quarter spaces are abolished, and a proportion adopted which is at once the very simplest and easiest for the child to imitate and the most gratifying to the eye of the reader. With this simple proportion before him in the copies the hand of the pupil conforms to it as fast as his muscles come under his control. There being no reason whatever why any "one-

space" letter should be written higher or lower than another, it is not so written, and the lines marking the spaces are absolutely useless.

The work from the outset is independent, the pupil's own, and tends always to independence and strength.

GROUPING.

In most copy-books the first drill is upon single letters or even upon a fragment of a letter, a process of course monotonous, and lacking interest to the child. The NATURAL SYSTEM begins with letters grouped in words, and words of real interest to the children. This is in strict accordance with the modern method of teaching reading, and we think will be instantly recognized as right.

PICTORIAL ILLUSTRATIONS.

The first two books of the NATURAL SYSTEM present the same advantage, in the way of graphic and attractive illustrations, which has always been given in primers and first readers, a thing which has never, to our knowledge, been done before in copy-books, but the desirability of which for small children all will admit. This use of illustrations was naturally suggested by a study of the whole matter from the point of view of what would be most helpful to the child.

LINES JOINING LETTERS IN A WORD.

For the sake of economy of time and effort, all the most rapid writers are prone to neglect the lines with which children have been so carefully taught to join letters in a word. They have not time to write what is *unnecessary*, and their letters stand distinct as in print, and of course with gain not only in speed but also in legibility. To direct the attention first to the letter forms and to rely on the *grouping* of the letters for the word-picture, as in print, and to leave the joinings of letters, especially at the outset, mainly to the convenience of the child, are a reversal of all previous methods, but a few minutes' reflection will convince any fair-minded person of the great propriety of such a course. It will be admitted that lines connecting letters in print would not only be utterly useless, but would greatly diminish legibility. It will be equally admitted that if from a sheet of writing all the joining lines should be

neatly erased the writing would be more legible. Even a casual examination of ordinary business writing will show that nine-tenths of the writers unconsciously leave slight gaps between letters in nearly every word they write. When one has once turned his attention to this matter the facts are always surprising. A little further reflection will show that these gaps denote *not* stoppages of motion, but *accelerations*, the pen, like the mind, leaping by the quickest method, and refusing to be occupied with anything between. Those who write most rapidly and at the same time most legibly, invariably make least account of careful joinings between the letters of a word.

But more important than all this is the fact that for beginners enforced attention to connecting lines prevents the proper comprehension of the letter forms. The rule should therefore be that instruction should not *insist* that the pen be kept on the paper and leave an ink trace from beginning to end of a word, but that the word should be thought of as a group of letters, the group separated by a sufficient space from the other groups, the joinings being mainly and easily determined by the gradually acquired choice and habit of the individual writer. The result will be handwriting characterized by naturalness and legibility, and a great deal of drill heretofore thought needful at the very outset will be seen to have been needless and out of place.

CHARACTER OF THE COPIES.

Throughout the series there has been a constant effort to correlate the other subjects of study with the special writing lesson. The best use of these copies will require special skill and preparation on the part of the teacher. In Book I the words and sentences should be taught in the regular reading lesson, the idea or thought being always clearly developed, then the writing lesson will have a special interest, and will firmly fix what has been previously developed. In the later books, before a copy is written, its statement should, so far as possible, be verified, and its relations traced, or its question should be definitely answered by either pupil or teacher. A question is often a more powerful educator than its answer.

CHAPTER II.

MATERIAL.

DESKS.

The important reform in writing is primarily a reform in the writing posture, hence the necessity for reconsidering the subject of school desks. There is no doubt that flat office desks and nearly flat school desks have come into general use as a result of the use of sloping writing, because the flat surface favors the hand position and the movement approved for slant writing. Now it has been found that the most hygienic school desk is one having a slope of at least fifteen degrees, adjustable as to height and distance from the pupil.

PENS.

In vertical writing it is essential that all lines shall be strong, hence the pens used must be of at least medium breadth and firmness, and very smooth.

In their investigations the authors of the *NATURAL SYSTEM* tested several hundreds of pens, but found none entirely satisfactory in all respects. They therefore designed a special pen, made in two grades, known as the Volpenna A and B, which has been found to be especially suited to the requirements of vertical writing and to general schoolroom and office work.

The Volpenna A is recommended for use in all grades, but for pupils of the higher grades who desire a finer pen, the Volpenna B has been provided.

The use of fine pens is partially responsible for the tendency among pupils to grip the pen, bend over their work, bringing the eyes close to the paper and tending to produce myopia.

PENCILS.

Pen and ink should be used from the first. In schools where provision is not made for the use of pens and ink in the lowest grade a substitute will be found in a large, soft pencil. The large copies in Books I and II will be found adapted to the use of such a pencil. Ordinary school lead-pencils should not be used, as they

require too much pressure to make a distinct mark, and so develop a bad habit of penholding. Besides, the more or less indistinct gray lines are always injurious to the eyes, especially of young children. The use of slates and slate-pencils, at least in the best schools, is past. In addition to being unhygienic, it emphasizes to the highest degree the faults of the lead-pencil.

COPY-BOOKS vs. BLACKBOARD.

Owing to the general dissatisfaction with the school writing, and to many serious defects in copy-books, some teachers have dispensed with the head-line books, and have taught writing by means of the blackboard and blank books, or practice paper. With the introduction of a much simpler and more natural style of writing, and such marked improvements in copy books, the conditions that led to the disuse of printed copies no longer exist. To the exclusive use of the blackboard and practice paper as a means of teaching writing, there are several objections. First, there are but few teachers well qualified to place before their pupils from day to day the best models; that is, simple, typical letter-forms free from the individuality of the teacher. As the pupils pass from grade to grade, they are unnecessarily imitating the special peculiarities of first one teacher and then another. Second, a copy written on the blackboard does not appear the same to pupils occupying different parts of the room. It is not essentially the same copy to one who sits at the side of the room and views it at an acute angle that it is to one directly in front. Third, to require young children to read very much from the blackboard is injurious to the eyes. This is especially true of the writing lesson in which there must be frequent glancing from the large forms on a black surface at a distance, to the small, near forms on a white surface, necessitating sudden changes in the adjustment of the eye similar to those experienced in passing from a dark room to one brilliantly lighted. Fourth, children work more carefully in a book that is to be preserved, than on practice paper that is but a thing for the day.

The blackboard should be used in connection with every writing lesson in illustrating prevailing errors, and showing how to correct them. Practice paper is of value in teaching or giving special practice on a particular point.

BLACKBOARD WRITING.

It is best to have the children begin writing upon the blackboard, and the practice should be continued as long and as much as circumstances will permit. This is at once most hygienic and most educational. First, because it requires the use of only the larger nervous and muscular areas, that are earliest developed and is in no way trying to the eyes; and second, in that it gives the best training in clear perception of form and in freedom of movement. The large number of pupils in most primary classes and the limited blackboard space will usually make it impossible to rely upon the blackboard practice as a means of teaching writing, but it should be used as freely as possible as an auxiliary to paper practice. Next to the blackboard and crayon the best materials for primary classes are writing books having large copies, and broad, smooth pens.

CHAPTER III.**THE WRITING LESSON.****TIME FOR THE WRITING LESSON.**

The lesson should be arranged if possible for the second period in the list of exercises for the day. The period immediately after recess and the last half hour in the afternoon are objectionable; in the case of the former the pupils' hands are likely to be unsteady from the excitement of vigorous play, and in the latter the pupils are apt to be too weary to give the best attention to the subject.

LENGTH OF LESSONS.

First Year . . .	From 15 to 20 minutes every day.
Second Year . . .	From 15 to 20 minutes every day.
Third Year . . .	From 20 to 25 minutes every day.
Fourth Year . . .	From 20 to 25 minutes every day.
Fifth Year . . .	From 25 to 30 minutes at least four times a week.
Sixth Year . . .	From 30 to 35 minutes at least three times a week.

POSITION.

The body should be self-supporting. Each arm should rest lightly on the upper part of the wrist, with the elbow hanging easily at the side, the weight of the arm being principally supported from the shoulder. The writing page should be directly in front of the body, with the writing line parallel to, and from three to seven inches from, the edge of the desk (Fig. 1).



Fig. 1.—Correct Position for Vertical Writing.

If the desk be quite flat, or too high, the page may be moved a little to the right of the median line of the body, or turned five or six degrees.

The position usually but improperly recommended for vertical writing is the same as that approved for the slant hand, with the arms spread and carried forward so that the forearm rests on the swell of the arm near the elbow. With this position the paper must be placed well up on the desk. At the ordinary, nearly flat, desk this necessitates a hunching of the shoulders, as seen in Fig. 2, a settling forward and a further spread of the arms, or turning the left side slightly toward the desk and placing the left arm upon it (Fig. 3).

There are three reasons for these positions. First, the inevitable tendency to settle forward and spread the arms when they are carried forward, the pose of the body being thus disturbed. Second, the effort to bring the eyes at a normal focussing distance from the page. Third, the natural desire to get the line of sight at nearly right angles to the plane of the writing surface.

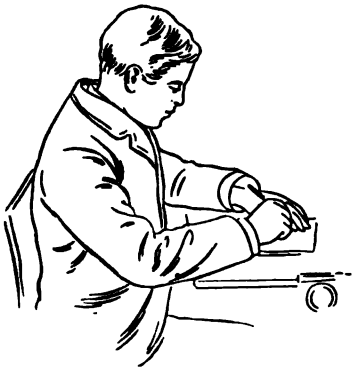


Fig. 2.

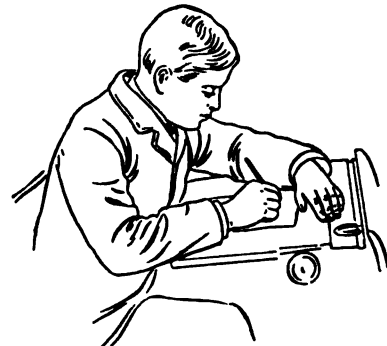


Fig. 3.

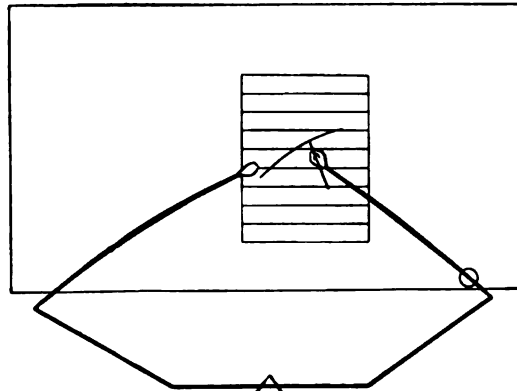


Fig. 4.

Incorrect Positions.

This matter of position is important, and it may be well to illustrate it in another way. With the forearm well up on the desk and the writing page directly in front of the body, the position commonly illustrated for vertical writing (Fig. 4), the arm will swing on a fixed rest at *o* and the tendency will be to write "uphill."

This is the reason why slant writers who approve this arm position, turn the paper so that the writing line is at right angles to the forearm. (Fig. 5). This position admits of the sliding movement for slant writing, but does not admit of a free, circular, or rolling movement such as is necessary for genuine vertical writing. For the latter the arm must rest very lightly on the upper part of the wrist, which then serves as a moving rest (Fig. 6), and the arm swings from left to right.

Only a desk of about fifteen degrees slope and properly adjusted as to height, admits of a truly hygienic posture (Fig. 1). With a sloping desk adapted to the height

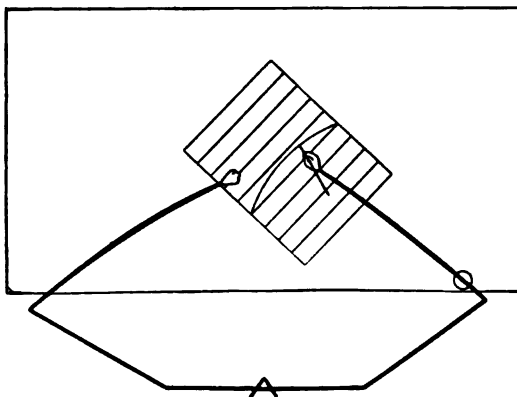


Fig. 5.—Incorrect Position.

of the writer the elbows may be kept in the normal position at the sides, thus avoiding all tendencies to draw the shoulders and spine out of position. The paper is brought

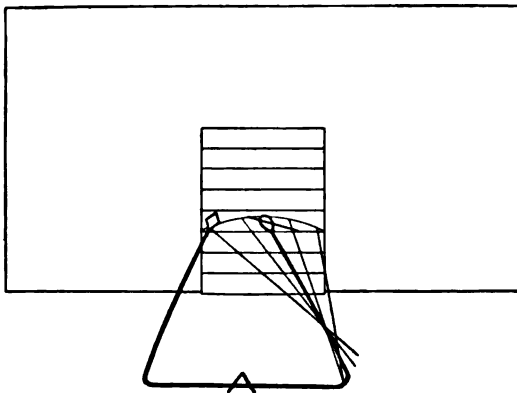


Fig. 6.—Correction Position of Paper and Arms for Vertical Writing.

at the proper angle nearer to the face, and there is no necessity for adapting the body to the desk in this respect. If the body inclines forward, as it usually does slightly, the bending is mainly at the hip joints, and there is no prolonged contraction of one set of muscles and a corresponding relaxation of another set, as when the shoulders are

drawn forward. There is no desire to spread out the arms and settle down with the chest against the desk.

It may be urged that this position does not give the necessary hand control to secure smooth, uniform, and precise letter-forms. Figure 7 is a reproduction of an old cut representing a monk of the Middle Ages, when all letter-forms were vertical, at work at the style of desk then in vogue, having a slope much greater than that we recommend. Of the writings of the monks of that time, W. and G. Audsley, probably the best authorities on these matters, say:—

“Perhaps there is nothing more calculated to astonish those who examine the manuscripts of the Middle Ages than the beautifully executed text. Faultlessly regular in every line, on every page, perfect in form of every letter, it is indeed a mystery to us how mortal hands could have executed it.”



Fig. 7.—Monk at Old Style Desk.



Fig. 8.—Mr. Edison at Desk.

It will also be urged that the position here advocated cannot admit of freedom and speed. This will be true at first to those who have spent years in training them-

selves in an entirely different habit. As one becomes accustomed to the position illustrated in Fig. 1 he will find that it permits the utmost freedom and rapidity of movement. This will be dealt with more fully under MOVEMENT and SPEED; but we give here (Fig. 8) a cut representing Mr. Edison (the inventor, who is also an expert telegrapher) at his desk, receiving a press message. Though an exceedingly rapid writer, being reputed to write from forty-five to fifty or more words a minute, he assumes a notably easy and natural position, though not conforming in every particular to the one we have given as the standard.

PENHOLDING.

A good general direction for penholding is: Let the third and fourth fingers be curled under so that the hand will move freely on the last or tip joint of the little finger, and if desired, also on the swell of the hand near the wrist. The pen should be held between the thumb and the second finger, as shown in the illustration (Fig. 9), the forefinger resting against the upper right side of the pen to steady it, and the penholder lying against the knuckle where the forefinger joins the hand. The concave surface of the pen should turn very slightly to the right.



Fig. 9.—Correct Method of Penholding for Vertical Writing.

CAUTIONS.—The hand-position and method of penholding recommended for slant writing (Fig. 10), the hand turned palm downward and resting on the tips of the third and fourth fingers, etc., are quite unsuited to vertical writing, in that they determine a

sort of sliding, zigzag movement, producing oblique upstrokes with, possibly, vertical downstrokes. Both this hand position and the peculiar style of writing to which it is adapted, are in some books now on the market shown for vertical writing. It is

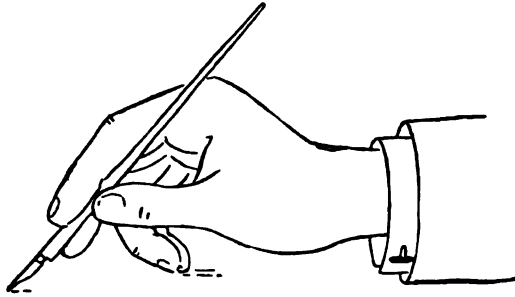


Fig. 10.—Method of holding Pen for Slanting Writing.

impossible with this zigzag movement to secure both legibility and speed. Under rapid action, the hand control declines and the writing degenerates, so that the letters generally become weak and characterless, and the "m," "n," "u," "i," "v," and "w" forms are indistinguishable.

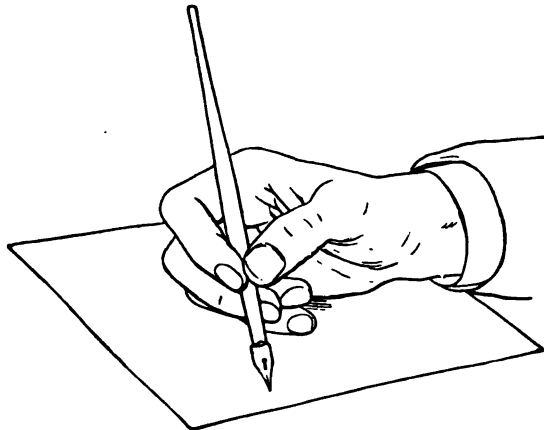


Fig. 11.—Hand turned too far to Right.

Many, on beginning vertical writing, make the mistake of going to the other extreme, and turn the hand too far to the right, with the penholder nearly at right angles to the forearm (Fig. 11). This gives a decided tendency to backhand and, what is even more objectionable, gives the strength to the horizontal curves instead of to the

vertical strokes (Plate I). The less important parts of the letters are made strong, and the more important correspondingly weak. There is, moreover, especially among

Once to every man and nation
comes the moment to decide.

Plate I.—Effect of turning Hand on Side.

young children using this position, a common tendency to cramp the hand and write with a very labored movement.

Some persons like to place the penholder between the first and second fingers. It will be readily seen that this method of penholding will have the same tendencies as that described above, and besides, particularly with young children, there is less control over the minute movements of the pen and the writing is likely to appear indifferent and scrawly.

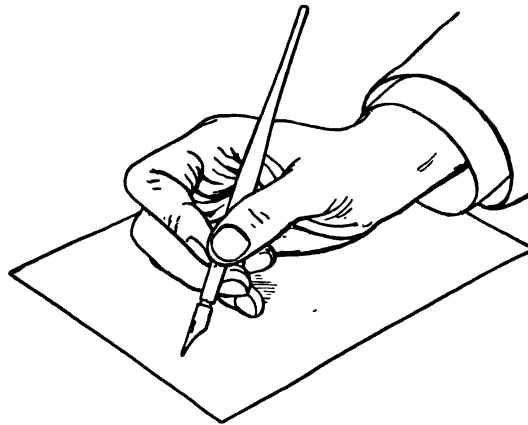


Fig. 12.—Cramped Position of Hand.

It is recognized that many persons use one or both of these last described methods of penholding and write quite well, and perhaps rapidly, but experience has shown that neither method is a safe one to *teach*.

Some children have a tendency to grip the pen, or from the use of pencils have formed the habit of gripping it (Fig. 12). This may usually be corrected by simply requiring the pupils to keep the first finger nearly straight.

MOVEMENT.

The position recommended admits of a free, easy, circular movement to which the NATURAL SYSTEM is especially adapted. A careful inspection will show that the basis of nearly all the letter forms in this system is the broad ellipse, the whole or any part of which can be made very easily and rapidly with this circular movement.

When children are taught this system from the first, and encouraged to observe the proper position and penholding, there is no need of special movement exercise or drill. The large copies furnish the best training in movement in the primary classes. With *older* pupils who have learned to write some other style it may be necessary to give regular and systematic practice on the following exercises:—

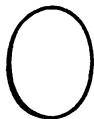


Plate II.



Plate III.



Plate IV.



Plate V.



Plate VI.



Plate VII.

These exercises should be practised with some care at first and the speed gradually increased. In the exercises represented by Plates III, IV, V, it is well to practise the parts connected at first and afterwards separately. As there is no change of action, it is easier to acquire the form and movement in the continuous exercise, but what is required in actual rapid writing is readiness in checking the action to facilitate change in the kind or direction of the movement.

In the exercises, Plates VI and VII, the action is not really the same as that used in writing, as the pen continues to run in precisely similar ways over the same surface, and so forms a habit of continuing an action instead of completing it. For

this reason many persons who have had much training and have free movement are necessarily slow writers.

As supplementary drill it will be found a good plan to give for brief practice commonly recurring small words, such as, *and, the, it, for, to, is, are*, etc. Such practice is not for movement in the ordinary sense, but rather for developing quickness of action.

At the nearly flat desk there is a tendency to press upon the wrist or hand. This can be remedied by having the pupils practise, for a short time at the beginning of each special lesson, with the hand and arm entirely free from the desk. Then gradually allow the hand to come down to the proper position heretofore described.

TRAINING IN GETTING CLEAR CONCEPTS.

It must be remembered that the child does not try to reproduce directly on paper the copy before him. It is rather the mental image acquired by looking at the word or letter that his hand tries to represent on the paper. Hence, an important part of the writing lesson is to train the pupils in accurate perception of the forms and relations of the letters. This requires on the part of the pupil a careful, scrutinizing observation of each word of the copy so that the first general perception of the word as a whole is followed by a detailed analytic perception of the letters, their proportions, and relations, and then a re-grouping of these detailed concepts in a clear image of the whole word. For this reason when taking up a new copy, especially in the primary grades, it is best for the pupils to have separate sheets of practice paper. Let the pupils look at the copy for a short time, then close the copy-book and write it on their practice paper. They should then open the book, compare their reproduction with the copy, and this should be repeated until the pupils show that they have a fair concept of the form of the copy.

ALLOW NO CARELESS WRITING.

While it is desirable to cultivate a reasonable degree of freedom, especially in the higher grades, there should be no careless work in the copy-books. If a pupil manifests a disposition to scribble, he should be limited to the practice paper until he shows that he is willing to do his best. Let the writing of a copy in the book be a

privilege, to be accorded in the first place as a sort of promotion from the initial lesson on the practice paper, and subject to forfeiture at any time subsequently, upon unmistakable evidence of indifference.

BACKHAND.

Some pupils have a decided tendency to write backhand, and some have always done so even when trained in the ordinary sloping hand. There is no serious objection to advanced pupils slanting their writing a little one way or the other, but many persons, who can complacently regard writing of fifty-two degrees' slant to the right, are shocked if they see it tipped five degrees to the left. The vertical seems to be a normal direction, and it is certainly the simplest standard by which to secure anything like uniformity in direction. If there is a general tendency among the pupils to write a backhand it will be because the desks are too high or too flat, or both, or the pupils turn the hand too far over on the side.

SPEED IN WRITING.

There has been a general impression that the vertical does not admit of being written as rapidly as the slant writing and that the development of slant has been a natural result of the striving after speed. The experience of many since the revival of the upright hand seems to confirm this impression. In America, particularly, no other consideration (except prejudice, the absence of consideration) has been such an obstacle to its still more rapid and general adoption, and perhaps nothing testifies more strongly to its merits than the fact that in spite of its being considered slow, vertical writing has, in so short a time, among a people who emphasize speed in all things, been accepted by thousands of educators as preferable to the slant style.

In Germany the same impression prevails. Dr. Berlin points out that the oblique system is a result of the effort after rapidity in writing, but inquires, "What has rapidity to do with instruction in primary writing? Even if the oblique system is much more convenient for rapidity, there is no need of accustoming children to it, at a time when they neither must nor should write fast."

On the other hand, it has again and again been pointed out that many of the most rapid, legible, business, and literary writers use the upright style.

Of this apparent contradiction we think a perfectly satisfactory explanation can be given. One naturally looks for this explanation in the different styles of vertical writing that prevail. Speed must depend on position and movement, and position and movement, again, determine the particular style of writing.

There is no doubt that the orthodox hand position and muscular action for slant writing permit a high degree of speed, but the action is of such a nature, a sort of forward and back movement, that as the speed increases the legibility rapidly declines, and as a consequence writing of anything like the standard slant generally breaks down and tends to become weak and illegible when the writer becomes severely pressed for time. It may be rapidly written, but in such case loses a quality vastly more important than speed.

Now, one of the styles of vertical writing most commonly advocated partakes partly of the nature of the sloping writing in that it has the oblique forward up-stroke, but a vertical down-stroke (Plate VIII). This it will be readily seen requires a zigzag


 A cursive script of the word "medium". The letters are connected, and the downstrokes are notably vertical, creating a zigzag pattern across the word.

Plate VIII.

action of the hand that cannot possibly be continued rapidly and produce legible forms. It is this style of vertical writing, prevalent in several varieties, that has been found to be slow. It is, however, very naturally, the style introduced by the Germans, and nearly all the American styles (though the writing looks better to us than the German) require essentially the same action. Other styles may look slow, but this has been proved to be so, and from a careful consideration of it the reason is obvious. When the hand must essentially change the kind or direction of its movement at the end of each short stroke, a rapid action producing legible-letter forms cannot be sustained.

There is a style of vertical writing which all will admit to be very rapid, but which fortunately no one has ventured to teach (Plate IX). This is a hand used by


 A cursive script of the word "medium". The letters are connected, and the downstrokes are smooth and continuous, contrasting with the zigzag style in Plate VIII.

Plate IX.

many persons who apparently place speed before legibility, esteeming their own time more precious than that of those to whom they write. Now, it must be observed

that the reason this hand can be written so rapidly is because the nature and direction of the movement very seldom change to any perceptible degree. It is an under-circular movement throughout.

While we do not approve this style, we call attention to it because it helps to show why the style used in the NATURAL SYSTEM is at the same time the most rapid and the most legible yet published.

There are in the NATURAL SYSTEM practically none of the oblique up strokes that characterize nearly all other styles of vertical writing and that render speed with legibility impossible. The up as well as the down strokes are vertical, and the turns are elliptical. Wherever possible, consistent with legibility, the under round turn has been used and the upper round turn dispensed with. This requires fewest changes of direction in the movement of the hand. The few upper turns also are round, as in "m," "n," and the last part of "h," and this curve too is capable of being made rapidly. With this style of writing, therefore, the only obstacle to great speed is the necessity for reversing the direction of the elliptical motion of the hand. This necessity, as has been pointed out, is reduced to a minimum, and the difficulty has been still further reduced to a surprising degree by training the pupils to regard the joinings as unim-

Plate X.

portant. Many persons who do not hesitate to use sharp "m's" and "n's" after almost any other letter, always make them rounded as initials (Plate X). This is because it is quite easy to make round upper turns at the beginning, but it is more difficult to change to that after the hand has been swinging along with the under-circular movement. For the same reason when the pen is lifted anywhere in a word, the next letter becomes the same as an initial letter, and the hand readily takes any desired direction (Plate XI).

Plate XI.

The correct form for writing both initial and medial "m" is illustrated in Plate XII.



Plate XII.

To most persons it will seem almost incredible that a disconnected hand can be written more rapidly than a continuous one, but a careful examination of the writing of a number of business or literary persons will clearly establish the fact.

A striking example of this is to be found in the handwriting of Thomas A. Edison, who when engaged as a telegraph operator was recognized as one of the fastest legible writers in America. In his ordinary writings he writes a very disconnected hand, but frequently joins two or three letters; when receiving a press message he seldom joins two letters.

For one who has always thought continuity necessary and has trained himself to write a connected hand, to make a temporary trial of the other method will not be satisfactory, because the action of the hand in writing becomes almost completely automatic through long-continued practice. This kind of habit cannot be changed in a few minutes or even hours.

ORDINARY CLASS WRITING.

No one need expect good results in writing who insists upon careful work only during the few minutes of the special writing lesson, and then permits carelessness in all other written work. In the public school course all writing must be considered training in writing, and more depends upon the way the pupils are led to do their general work than upon special preparations for, or skill in conducting, the special lesson.

THE TEACHER'S GENERAL WRITING.

What has been said of the formative force of the pupil's general work is also true of the teacher's work. The teacher whose blackboard writing is uniformly neat and legible, will generally have a class of uniformly good writers, and one whose general work is indifferent or poor will find these characteristics reflected in the work of his class.

CHAPTER IV.

SPECIAL SUGGESTIONS.

BOOK I.

It would be well for pupils to do much work upon the blackboard during the first half-year in school.

Book I should be used during the first year, together with practice paper and broad, smooth pens, or large, soft lead-pencils.

Time, at least fifteen minutes daily.

Before being used as a writing exercise each word in the copies on pages 1 to 13 should be developed in the reading or language lessons.

When writing a copy in the book the pupil should have a clear mental picture of the word or sentence to be written, so that he will not try to laboriously copy the headline in every detail. When the pupil once forms the habit of trying to reproduce slowly each part of a letter in the copy, it will always be difficult for him to write with a free action.

One of the best ways to encourage freedom of action, and at the same time train the child to observe form closely, is the plan given under "Training in Getting Clear Concepts." For instance, let the child open the book at the first page and look well at the word "ice," and then close the book or cover the copy, and write the word as he remembers it. Let him then open the book and compare his effort with the copy. He will now observe the form more closely. Let him close the book again and write the exercise on his practice paper. This should be repeated until he can write the word fairly well.

After sufficient preliminary practice of this sort, permission may be given to write in the book.

Pupils who have been trained to write between lines with narrow spaces, or who have had practice in writing from small, hairline copies, will find it difficult to write the large, bold forms, and at first are likely to make the letters very irregular in size, but they soon gain the power of writing them freely and of fairly uniform size.

In writing the single-word copies, pages 1 to 13, it may be well to practise

each word separately, and write a column down the page before practising another, but in doing this care must be taken that the column be kept fairly straight.

Many teachers will at once see the advantage of leaving out all unnecessary connecting lines between letters in the primary work. A child cannot see the essential forms of the letters until they are placed before him without the extra lines. For instance, in the word "cow," on page 1, if a line were drawn to connect the "o" and "w," the form made by the connecting line and the up line of the "o" and the down line of the "w" would be just as important as any other to the child; but when he once becomes familiar with the appearance of the word "cow" without the extra lines, you may add as many as you wish, but the child can always see the essential forms of the individual letters.

It may be urged that, without the connecting lines, the pupil will separate too far the letters in a word; but even if he does at first, he soon learns to group them closely together in the word.

Except in the case of the "d" and "p" and of the cross lines on the "t," "f," and "x," the pen should not be lifted in making the small letters.

Begin the "O" and "o" at the middle of the top, and the "a," "d," and "q" where the curved top joins the straight line.

All written work should be done with the same kind of materials as are used in the special writing lesson.

BOOK II.

Broad, smooth pens should be used and also practice paper.

Time, at least twenty minutes daily.

Note the directions for teaching form given under Book I. Pupils soon gain the power of getting a mental picture of the whole line and reproducing it on paper.

Begin "O," "o," and "Q" at the middle of the top and add the tail of "Q" afterward.

The "f" in this book has been modified with a loop except when used as an initial letter in a word.

BOOK III.

Broad, smooth pens should be used and also practice paper.

Time, at least twenty-five minutes daily.

Note previous suggestions as far as they apply to this year.

For this grade the optional forms of "r" and "s" have been introduced for convenience in joining.

In "T" and "F" make the stem and add the top afterward.

BOOKS IV, V, AND VI.

Practice paper and broad, smooth pens should be used.

Time, at least thirty minutes four times a week.

When the pupils have had considerable training in vertical writing, speed practice should begin, say in the fifth year, and it should be given regularly during the sixth year after completing each copy page. When the pupils have practised a copy and written it in their books, they should be trained to see how many times they can write it in one or two minutes.

CHAPTER V.

COURSES OF STUDY IN WRITING.

On first introducing the system into schools, it is exceedingly desirable to begin with as large letter-forms as seems practicable. Probably the best writing practice for all beginners would be in Book I or II, but with older pupils there will be more or less objection to using the primary books, and the ideal method of grading in the books will have to be modified accordingly.

Either of the following plans may be used. The first plan is advised for the first year's use of the system.

FIRST PLAN.

First year	Book I.
Second year	Books I and II.
Third year	Books II and III.
Fourth year	Books III and IV.
Fifth year	Books IV and V.
Sixth year	Books V and VI.
Seventh and following year	Book VI and Business Forms.

SECOND PLAN.

First year	Book I.
Second year	Book II.
Third year	Book III.
Fourth year	Books III and IV.
Fifth year	Books IV and V.
Sixth year	Books V and VI.
Seventh and following year	Book VI and Business Forms.

CHART OF THE NATURAL SYSTEM OF VERTICAL WRITING

STANDARD FORMS.

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z

OPTIONAL FORMS.

a B D F G G M N O P Q R
S T V W Y y

STANDARD FORMS.

a b c d e f f g h i j k l m n
o p q r r s s t u v w x y z

OPTIONAL FORMS.

f g h k k p q y

FIGURES AND SIGNS.

1 2 3 4 5 6 7 8 9 0 $\frac{1}{2}$ \$ % & @ &

SAMPLE COPY FROM BOOK I.



Bees can say buzz.

SAMPLE COPY FROM BOOK II.



Rails live by streams.

SAMPLE COPY FROM BOOK III.

Snails carry their houses.

17

SAMPLE COPY FROM BOOK IV.

²² Why have birds hollow bones?

SAMPLE COPY FROM BOOK V.

Llanos, South American plains.

11

SAMPLE COPY FROM BOOK VI.

Eli Whitney, a teacher in Georgia, invented the Cotton-gin, 1793.

